

In the claims:

1. (currently amended) In a packet forwarding device, a method comprising:

monitoring types of packet traffic received in the packet forwarding device;

determining whether a type of packet traffic received in the packet forwarding device is a unicast type or a multicast type; ~~and~~

when the type of packet traffic is unicast type, selectively modifying a priority of the traffic in response to a destination parameter of a plurality of destination parameters including IP address, destination VLAN and egress port of the packet traffic; and

when the type of packet traffic is multicast type, selectively modifying the priority of the traffic in response to a source parameter of a plurality of source parameters including IP address, source VLAN and ingress port of the packet traffic,

wherein the step of selectively modifying the priority includes performing at least one of changing assignment of the packet traffic from a queue having a first priority to a queue having a second priority, dropping packets of the packet traffic, copying packets of the packet traffic, and diverting packets of the predetermined type in the packet traffic.

2. (cancelled)

3. (previously presented) The method of claim 1, wherein the source parameter includes a source MAC address.

4. (cancelled)

5. (previously presented) The method of claim 1, wherein the type of packet traffic is associated with its ingress port.

6. (original) The method of claim 1, wherein the type of packet traffic is based on its destination.

7. (previously presented) The method of claim 6, wherein the destination parameter includes a destination MAC address.

8. (cancelled)

9. (previously presented) The method of claim 1, wherein the type of packet traffic is associated with its egress port.

10. (currently amended) The method of claim 1, wherein the type of traffic is based on its protocol, and including selectively modifying the priority of the traffic in response to its protocol.

11. (original) The method of claim 10, wherein the protocol of traffic includes FTP.

12. (original) The method of claim 10, wherein the protocol of traffic includes HTTP.

13. (currently amended) In a packet forwarding device, a method comprising:

monitoring environmental conditions of reception of packet traffic in the packet forwarding device;

determining whether environmental conditions ~~of~~ associated with reception of packet traffic in the packet forwarding device meet predetermined criteria;

when the environmental conditions meet the predetermined criteria, determining whether a type of packet traffic received in the packet forwarding device is a unicast type or a multicast type;

when the type of packet traffic is unicast type, selectively modifying a priority of the traffic in response to a destination parameter of a plurality of destination parameters including destination IP address, destination VLAN and egress port of the packet traffic; and

when the type of packet traffic is multicast type, selectively modifying the priority of the traffic in response to a source parameter of a plurality of source parameters including source IP address, source VLAN and ingress port of the packet traffic,

modifying a priority of the packet traffic using parameter information associated with a type of packet traffic, wherein the type of packet traffic includes unicast and multicast traffic, and wherein source parameter information is used for multicast traffic and destination parameter information is used for unicast traffic; and

wherein the step of modifying includes automatically performing at least one of changing assignment of packet traffic from a queue having a first priority to a queue having a second priority, dropping packets in the packet traffic, copying packets in the packet traffic, and diverting packets in the packet traffic.

14. (original) The method of claim 13, wherein the environmental conditions meeting the predetermined criteria include time of day.

15. (original) The method of claim 13, wherein the environmental conditions meeting the predetermined criteria include network configuration changes.

16. (original) The method of claim 15, wherein the network configuration changes include network failures.

17. (original) The method of claim 15, wherein the network configuration changes include network congestion.

18. (original) The method of claim 13, wherein the environmental conditions meeting the predetermined criteria include network error rates.

19. (original) The method of claim 13, wherein the environmental conditions meeting the predetermined criteria include line use of high level protocols.

20. (currently amended) In a packet forwarding device, a method comprising:
monitoring traffic patterns of packet traffic received in the packet forwarding device;
determining whether traffic patterns of packet traffic in the packet forwarding device meet predetermined criteria; and

when the traffic patterns of packet traffic meet the predetermined criteria, determining whether a type of packet traffic received in the packet forwarding device is a unicast type or a multicast type;

when the type of packet traffic is unicast type, selectively modifying a priority of the traffic in response to a destination parameter of a plurality of destination parameters including destination IP address, destination VLAN and egress port of the packet traffic; and

when the type of packet traffic is multicast type, selectively modifying the priority of the traffic in response to a source parameter of a plurality of source parameters including source IP address, source VLAN and ingress port of the packet traffic,

selectively modifying a priority of the packet traffic using parameter information associated with a type of packet traffic, wherein source parameter information is associated with multicast type packet traffic and destination parameter information is associated with unicast type packet traffic, and wherein the step of selectively modifying includes automatically performing at least one of changing assignment of at least one type of packet traffic from a queue having a first priority to a queue having a second priority, dropping packets in the packet traffic, copying packets in the packet traffic, and diverting packets in the packet traffic.

21. (original) The method of claim 20, wherein at least some of the traffic patterns are based on specified source ports.

22. (original) The method of claim 20, wherein at least some of the traffic patterns are based on specified destination ports.

23. (original) The method of claim 20, wherein at least some of the traffic patterns are based on specified source MAC addresses.

24. (original) The method of claim 20, wherein at least some of the traffic patterns are based on specified IP flows.